Spatial-Temporal (ST) Math

2015-2016 Scale-Up Program

Overview: ST Math's mission is to ensure all students are mathematically equipped to solve the world's most challenging problems. Through our uniquely visual, non-language based approach to teaching math–delivered through our ST Math instructional software–students across the country are deeply understanding math, developing perseverance and problem-solving skills, and becoming life-long learners prepared for success.
Grade Levels: K-6

Program Summary

Spatial-Temporal (ST) Math® is the leader in visual math instruction and represents the highest quality and most effective blended learning math solution in K-12 education.

Created by MIND Research Institute, ST Math is game-based instructional software for K-12, offered as a whole-class instructional supplement and is designed to boost math comprehension and proficiency through visual learning. Integrating with classroom instruction, ST Math incorporates the latest research in learning and the brain and promotes mastery-based learning and mathematical understanding. The ST Math software games use interactive, graphically-rich animations that visually represent mathematical concepts to improve conceptual understanding and problem-solving skills.

Whether in the classroom, computer lab or at home, learning never stops with ST Math. When teachers bring ST Math into the classroom, projected onto a screen or interactive whiteboard, the software games help students make connections between the visual representations from ST Math and symbolic representations found in their core instruction. With the touch functionality of ST Math, students experience an even greater level of interactivity. With ST Math, learning continues outside of school too, as teachers can assign specific math objectives in the software program for homework.

ST Math software, comprised of thousands of math games, allows students to engage in a personalized, self-paced learning path through Common Core-aligned math objectives.

Project Description/Objectives

- To ensure that all students are mathematically equipped to solve the world's most challenging problems;
- To utilize cutting edge research in learning and neuroscience to inform continual improvement of programming;
- To provide students with the opportunity to strengthen neural connections as they learn new concepts, immersing students in richly interactive, hands-on learning;
- To provide educators with a meaningful, effective technology resource to engage their students and provide rigorous content;
- And, to provide Iowa students with a program that has a track record of success.

What does the project provide?

- Access to ST Math Software at school site and updates;
- Consultation with MIND Implementation Manager, generating a Project Plan for successful and timely implementation;
- Thorough Professional Development provided to teachers and administrators for Start-up;
- Post-Startup Training and Professional Development modules, including video and scheduled live webinars, to improve program knowledge, use, and outcomes;
- Ongoing Best Practices Consulting and Personalized Support through phone, e-mail, Skype, or webinar;
- Monthly summary progress reports at school or district level;
- Yearly data meeting to review the past year and set goals for the following year;
- ST Math Digital Training Manuals;
- Web-based class level, school level, and individual student reports;
- Real-time, class-level, school-level, and individual reports, indicating level of math standards mastery and RTI growth.
- Service and technical support via e-mail, phone, or online chat;
- And, a suite of online support resources.

What is required by the applicant in order to implement this program?

ST Math is a web-delivered resource that can be accessed from any Internet connected computer or tablet. The applicant will need to have the ability to connect to the Internet. Recommended implementation time for students is 90 minutes per week (60 minutes for K-1).

All teachers using ST Math should attend Professional Development either in-person or via the web prior to implementing. This ensures that all parties are comfortable, prepared, and supported in their usage of ST Math.

Website: http://mindresearch.org/
Founder's TEDx Talk: https://www.youtube.com/watch?v=2VLje8QRrwg
Demo Games: http://mindresearch.org/play/
Data and Results: http://mindresearch.org/results/

Interactive Introduction to ST Math:
http://learn.stmath.com/courses/c01/
Guide to WestEd Evaluation of ST Math:
http://mindresearch.org/pdf/WestEd_CA_Roadmap_web.pdf